

# PATENT COOPERATION TREATY

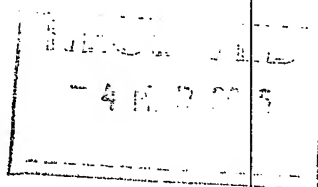
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From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

## PCT

To:

CANNING, Lewis, Reuben  
Amersham plc  
Amersham Place  
Little Chalfont  
Buckinghamshire HP7 9NA  
GRANDE BRETAGNE



### NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of mailing  
(day/month/year)

02.03.2005

Applicant's or agent's file reference  
PZ02101-PCT

### IMPORTANT NOTIFICATION

International application No.  
PCT/GB 03/05319

International filing date (day/month/year)  
05.12.2003

Priority date (day/month/year)  
06.12.2002

Applicant  
AMERSHAM PLC

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.

2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.

3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

#### 4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

DUE DATE:	—
FORMALITIES:	JFH ✓
PAT. OFF:	LPC
ON DB:	—
CASE NO:	P202101-PCT

Name and mailing address of the international preliminary examining authority:



European Patent Office - Gitschiner Str. 103  
D-10958 Berlin  
Tel. +49 30 25901 - 0  
Fax: +49 30 25901 - 840

Authorized Officer

Geier, A

Tel. +49 30 25901-706

## PATENT COOPERATION TREATY

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01 JUN 2005



# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PZ02101-PCT	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/GB 03/05319	International filing date ( <i>day/month/year</i> ) 05.12.2003	Priority date ( <i>day/month/year</i> ) 06.12.2002
International Patent Classification (IPC) or both national classification and IPC A61K31/18		
Applicant AMERSHAM PLC		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.
- ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).
- These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:
- I ☒ Basis of the opinion
  - II ☐ Priority
  - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - IV ☐ Lack of unity of invention
  - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - VI ☐ Certain documents cited
  - VII ☐ Certain defects in the international application
  - VIII ☐ Certain observations on the international application

Date of submission of the demand  14.06.2004	Date of completion of this report  02.03.2005
Name and mailing address of the international preliminary examining authority:   European Patent Office - Gitschiner Str. 103 D-10958 Berlin Tel. +49 30 25901 - 0 Fax: +49 30 25901 - 840	Authorized Officer  Beranová, P  Telephone No. +49 30 25901-333 

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/GB 03/05319

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-33 as originally filed

**Claims, Numbers**

1-34 as originally filed

**Drawings, Sheets**

1/8-8/8 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/GB 03/05319

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-34
	No: Claims	-
Inventive step (IS)	Yes: Claims	-
	No: Claims	1-34
Industrial applicability (IA)	Yes: Claims	1-34
	No: Claims	-

2. Citations and explanations

**see separate sheet**

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

5.1 Reference is made to the following document:

D1: WO 02/067761 A (BRISTOL MYERS SQUIBB PHARMA CO) 6 September 2002 (2002-09-06)

5.2 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1 - 34 does not involve an inventive step in the sense of Article 33(3) PCT.

5.3 The document **D1** is regarded as being the closest prior art and discloses labelled macrophage scavenger receptor antagonists and their use for imaging atherosclerosis, vulnerable plaque, coronary artery disease, thrombosis, ischemia and stroke (claims 1 and 13).

The present application differs from this known teaching of D1 in that the rings A and B of used macrophage scavenger receptor antagonists are linked by the group **-SO<sub>2</sub>-NH-** instead of **-CO-NH-** (D1).

The problem to be solved by the present invention may therefore be regarded as providing further labelled macrophage scavenger receptor antagonists useful for imaging cardiovascular diseases, such as atherosclerosis.

However, it is well known in the art that, the groups **-SO<sub>2</sub>-** and **-CO-** can be considered as equivalent and act as isosteres. According to the concept of isosterism, similar physico-chemical behaviour is to be expected for molecules in which the group **-CO-** has been replaced by **-SO<sub>2</sub>-**.

Therefore, it seems that no inventive step could be acknowledged for the subject-matter of claims 1 - 34, as far as novel (Article 33(3) PCT).